

**INTERMOUNTAIN POWER SERVICE CORPORATION
INTERMOUNTAIN GENERATING STATION 1 & 2
HP TURBINE RETROFIT**

8.2. ROTOR BALANCING

Grooves machined into the rotor shaft before stage 1 and after stage 8, permit the attachment of balancing weights. The weights are located in the appropriate groove and are retained in position by locking screws.

Additionally a series of 30 tapped holes around the rotor at each end enable further trim balance weights to be secured to the rotor at site, accessible through the outer gland covers.

9. ROTOR SHAFT SEALS (Figs. 1 and 10)**9.1. GENERAL**

Steam leakage across the rotor shaft is minimized by three gland assemblies designated as the HP front gland assembly, the HP inlet gland assembly and the HP rear gland assembly.

The existing HP front and rear gland assemblies are retained. For details of these glands, refer to the existing station manual.

9.2. HP INLET SHAFT GLAND (Fig. 10)

The HP inlet shaft gland assembly is positioned at the rear of the HP inner cylinder and engages with stage 1 diaphragm. A deflector is fitted to the front of the gland carrier between the inner cylinder and stage 1 diaphragm to form the steam inlet annulus flow guide.

The HP inlet shaft gland is housed in a gland carrier which is constructed from top and bottom half, low alloy steel castings. They are bolted together at the horizontal joint and remain in the bottom half cylinder when the top half cylinder is removed.

Jacking screws are provided for maintenance purposes.

The carrier is supported on suspension keys attached to the inner cylinder, transverse location is provided by a single key on the module centerline integral with the lower half gland carrier and engaging in a keyway machined in the inner cylinder.

The carrier is located axially by an integral collar which engages a machined groove in the bore of the inner cylinder. A spring loaded seal is located between the rear face of the collar and the inner cylinder groove to minimize steam leakage.

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